Department of the Army Headquarters, United States Army Training and Doctrine Command Fort Monroe, VA 23651-1047

24 March 2005

Force Development TRADOC STANDARD SCENARIOS FOR COMBAT DEVELOPMENTS

Summary. This regulation establishes United States (U.S.) Army Training and Doctrine Command (TRADOC) policies, procedures, and responsibilities for the management of scenarios used to support TRADOC combat developments.

Applicability. This regulation applies to all TRADOC elements, to include Headquarters (HQ) TRADOC staff, major subordinate commands, centers, schools, battle labs, and activities. For purposes of this regulation, the term "proponent TRADOC labs, centers, and schools" includes the Army Medical Department (AMEDD). Agencies outside TRADOC should follow the policies described in this regulation when requesting scenario support from TRADOC.

Supplementation: The U.S. Army TRADOC Analysis Center (TRAC) may supplement this regulation. Further supplementation is prohibited without prior approval from TRADOC Futures Center (ATFC-ED).

Suggested improvements. The proponent of this regulation is the TRADOC Futures Center. Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Director, TRADOC Futures Center (ATFC-ED), 20 Whistler Lane, Fort Monroe, Virginia 23651-1046. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal).

Availability. This regulation is available on the TRADOC homepage at http://www.tradoc.army.mil/tpubs/regndx.htm.

^{*}This regulation supersedes TRADOC Regulation 71-4, 2 January 2001.

CONTENTS

	Paragraph	Page
Chapter 1		
Introduction		
Purpose	1-1	3
References		3
Explanation of abbreviations and terms	1-3	3
Responsibilities		3
Roles of other organizations		6
Chapter 2		
Scenario Terminology		
Purpose of scenarios	2-1	6
Scenario descriptions	2-2	7
Scenario uses	2-3	8
Scenario characteristics	2-4	9
Scenario resolution	2-5	10
Scenario development imperatives	2-6	10
Scenario production plan	2-7	11
Chapter 3		
Scenario Development Process		
Unit of Employment scenario development		12
Unit of Action scenario development	3-2	15
Study scenario selection		17
Vignette development		18
Experiment scenarios		19
Scenario and vignette certification		19
TRADOC Scenario Gist Book	3-7	20
Chapter 4		
Scenario Release		
Release authority		20
Scenario distribution	4-2	20
Appendixes		
A. References		21
B. Scenario Classification Guide	• • • •	23
Glossary	• • • •	27

Chapter 1 Introduction

- 1-1. Purpose. This regulation establishes general management policies, procedures, and responsibilities for planning, development, approval, release, distribution, and use of scenario standard material for TRADOC experiments, studies, and analyses. It applies to TRADOC scenarios developed and used to support experiments, studies, and analyses for combat developments.
- **1-2.** References. Appendix A contains a listing of the required and related publications.
- 1-3. Explanation of abbreviations and terms. Abbreviations and terms used in this pamphlet are explained in the glossary.

1-4. Responsibilities.

- a. Headquarters, TRADOC.
- (1) Deputy Commanding General Futures/Director, TRADOC Futures Center (FC) is the TRADOC staff proponent for TRADOC scenarios. The Director, FC:
- (a) Provides staff guidance, sets priorities for scenario development, exercises staff supervision for scenario development, and oversees use of TRADOC scenarios.
- (b) Reviews and approves Unit of Employment (UE) scenarios and study scenarios.
- (c) Ensures the joint nature of warfighting is addressed.
- (d) Coordinates requirements for theater resolution scenarios with Headquarters, Department of the Army (HQDA) Deputy Chief of Staff (DCS), G-3 and Center for Army Analysis (CAA).
- (e) Allocates resources through the normal resource cycle.
- (f) Coordinates development of and publishes an annual Scenario Production Plan.
- (g) Director, Concept Development and Experimentation (CDE), approves Unit of Action (UA) scenarios and vignettes derived from TRADOC-approved UE scenarios.

- (h) Chief, Joint and Army Concepts Division (JACD), executes scenario responsibilities of the FC and coordinates scenario activities for TRADOC.
- (i) Requirements Integration Directorate is the TRADOC staff proponent for doctrinal representation and accuracy of TRADOC scenarios.
- (2) Deputy Chief of Staff for Intelligence (DCSINT) is the TRADOC executive agent for development, coordination, and approval of the operational environment (OE) portrayal, including threat forces and OE variables for standard UE scenarios, UA scenarios, study scenarios, and vignettes. The Assistant DCSINT (ADCSINT)-Threats executes this responsibility.
- (a) The DCSINT assists in visualizing and developing the OE over time. This includes not only the enemy, weather, and terrain, but also the composite of other variables that describe the battlespace from the continental U.S. to the area of operations, and that affect combat operations. The ADCSINT-Threats executes this responsibility through close coordination with school threat managers and TRAC scenario developers.
- (b) The Security Directorate is the HQ TRADOC staff proponent for the release of scenario material to foreign nationals.
- (c) The ADCSINT-Futures develops the OE and threat portrayal for future scenarios beyond the Defense Planning Scenario (DPS) to facilitate concept development.
- (3) Deputy Chief of Staff for Operations and Training (DCSOPS&T) is the TRADOC staff proponent for application of scenarios to training evaluations, studies, simulations, and exercises.
- b. Director, TRAC, is the TRADOC executive agent for development of scenarios for use in studies and analyses. Director, TRAC:
- (1) Coordinates scenario activities with FC, proponent TRADOC battle labs, centers, and schools, HQDA, CAA, U.S. Army War College (AWC), U.S. Army Materiel Systems Analysis Activity (AMSAA), combatant commands (COCOM), other services, other major commands, and study agencies.

- (2) Develops UE and UA scenarios in support of combat developments and submits to TRADOC FC for approval. Each scenario can support a multitude of combat development studies, and as such, is designed in the baseline form and offers a feasible, acceptable, and suitable concept that is both illustrative and flexible in order to support all of its intended uses.
- (3) Collects and applies approved concepts and data to scenario production.
- (4) Certifies standard scenarios and the loading of scenarios into various models.
- (5) Is responsible for scenario release to TRADOC and outside organizations.
- (6) Organizes and conducts an annual scenario conference with FC oversight.
- c. The Commanding General (CG), U.S. Army Combined Arms Support Command (CASCOM), develops, coordinates, and approves combat service support (CSS) scenario inputs within their area of expertise and incorporates input from the Army Medical Department Center and School (AMEDDC&S), Soldier Support Institute, and their proponent schools.
- d. The Deputy Commanding General for Combined Arms/Commander, Combined Arms Center (CAC) reviews U.S. doctrine and operational concepts used in standard UE scenarios.
- e. Commanders, TRADOC centers and schools, develop, coordinate, and approve blue proponent input and forward to TRAC for integration into scenario developments.
- f. Commandant, AWC, provides consultant services in the development of friendly campaign plans. This is normally accomplished through discussion and review of friendly campaign plans.
- g. Directors, TRADOC battle labs, develop, coordinate, and provide blue concept input and development support to TRAC for integration throughout the scenario developments.

1-5. Roles of other organizations.

- a. Office of the Secretary of Defense (OSD) provides the DPS sets that are the basis for all TRADOC standard scenarios.
 - b. Headquarters, Department of the Army:
- (1) Provides guidance for TRADOC scenario activities to HQ TRADOC.
- (2) Deputy Chief of Staff, G-2 provides necessary threat guidance and coordinates approval of combat development scenarios, when appropriate.
 - (3) Deputy Chief of Staff, G-3:
- (a) Serves as primary HQDA interface to OSD and Joint Staff DPS development process.
 - (b) Develops U.S. theater force structure.
- (4) Director, CAA, provides information on CAA-developed theater-level scenarios.
- (5) The CG, U.S. Army Test and Evaluation Command, applies TRADOC scenarios to testing and evaluations.
- c. Commander, AMEDDC&S, develops, coordinates, and approves scenario inputs within the AMEDD area of expertise and forwards to CASCOM for incorporation into CSS scenario inputs.
 - d. Director, AMSAA:
- (1) Provides systems performance data and the methodology for using the data in combat models.
- (2) Upon request, provides reviews of data for particular study efforts to ensure that data and methodologies are up to date with current system capabilities.

Chapter 2 Scenario Terminology

2-1. Purpose of scenarios. TRADOC will "conduct war-gaming and simulations to assist in evaluating warfighting concepts, materiel systems, force designs, operational plans, and battlefield

effectiveness" (per Army Regulation (AR) 10-87, para 12-3d(2)). A scenario is a tool that supports the evaluation of Army doctrine, organizations, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). It provides a framework for assessing the capabilities of U.S. forces and equipment under specified situations; identifying potential improvements to Army, joint, and multinational services DOTMLPF; and evaluating proposed concepts and changes to the Army.

2-2. Scenario descriptions.

- a. Operational scenario. An operational scenario is a graphic and narrative description of area, environment, means (political, economic, social, and military), and events of a future hypothetical conflict. An operational scenario describes the global conditions before and during armed conflict; friendly and threat forces, to include weapons, munitions, and sensors lists (WMSL); friendly and threat strategic and theater plans, including air, naval, and special purpose forces; friendly, unaligned, or independent and threat behavioral and cultural operational aspects and considerations; and operational and tactical orders and plans for friendly and threat forces involved in the conflict. It also includes considerations of geographic setting (weather, climate, topography, and vegetation), health hazards, transportation facilities, and other regional and operational elements. When appropriate, the operational scenarios will also address those unaligned or independent forces that may oppose threat, friendly, or both forces.
- (1) Standard operational scenario. A TRADOC standard operational scenario follows a rigorous development and validation process. Standard scenarios are derived from the DPS and require TRADOC agencies' and senior leadership's detailed coordination, review, and approval. An approved operational scenario portrays approved doctrinal and emerging concepts.
- (2) <u>Nonstandard operational scenario</u>. A nonstandard scenario is developed as an exception to TRADOC policy when a requirement exists to evaluate a new concept in an environment or timeframe for which an operational scenario does not exist. Nonstandard scenarios are not derived from the DPS.
- b. <u>Study scenario</u>. Study scenarios are the application of the operational scenario in a modeling and simulation or other gaming tool to serve as a base case for a particular study. The study scenario usually reflects modifications of the operational scenario in order to meet the needs of a study. The study

scenario is not significantly different from the operational scenario so as to affect the outcome or concept of operation. Alternatives are measured using the study scenario as the base case.

- c. <u>Vignette</u>. A vignette is a study or experiment scenario focused on a specific region, action, or snapshot in time within an approved operational scenario. Example operations are military operations on urbanized terrain, civil disturbance, or cordon and secure.
- d. <u>Dynamic scenario</u>. A dynamic scenario is a version of an operational or study scenario that is modeled in a simulation. Final gaming may not match the planned operations of the operational or study scenario, based on circumstances occurring during gaming and associated contingency plans.

2-3. Scenario uses.

- a. Combat development.
- (1) Studies include requirements analysis across the range of DOTMLPF. Examples include exploration of doctrinal concepts in the Title X wargames, studies on organizational changes needed for the Future Force, and studies to determine the types of facilities required to support potential future military operations.
- (2) Analysis may include the full range of Functional Area Analysis, Functional Need Analysis, Functional Solution Analysis in support of the Capabilities Integration and Development System, analysis of material concepts, analysis of alternatives, and key performance parameter analysis for material systems acquisition.
- (3) Experimentation includes the full range of experiments conducted to examine or demonstrate the potential of new technologies or new concepts. TRADOC live, virtual, and constructive experiments should all use approved TRADOC scenarios or vignettes.
- b. Testing and evaluation. Defense Planning Scenario-derived TRADOC standard scenarios provide the foundation for testing of materiel systems and organizations. Refer to <u>AR 381-11</u> and <u>TRADOC Regulation (Reg) 381-1</u> regarding TRADOC ADCSINT-Threats support for testing and evaluation.

c. Training. May use scenarios developed for combat developments as the basis for training scenarios.

2-4. Scenario characteristics.

a. Realistic:

- (1) A realistic scenario portrays appropriate forces and tactics on real terrain in expected environmental conditions.
- (2) A realistic scenario derived from the DPS has inherent credibility in terms of realism.
- (3) Projected or programmed forces (red, blue, or other) are derived from budget projections, military force structure plans, and intelligence preparations. After establishing a base case, encourage the use of excursions to consider unexpected developments.

b. Reasonable:

- (1) The scenario is the likely road to war (derived from DPS). Senior leaders must accept the scenario.
- (2) Concept of the operation is acceptable, suitable, and feasible. Ensuring the road to war, concept of operations, and courses of action (COA) portrayed meets the criteria of acceptability, suitability, and feasibility ensures reasonableness.

c. Robust (a prerequisite for reusability):

- (1) A stressful situation or combat action provides a "measurement space" to assess the capabilities of doctrinal concepts, tactics, forces, and weapons systems and enables meaningful comparisons among alternatives.
- (2) The scenario must provide combined arms operations (maneuver, fires, command and control, logistics, air defense, etc.) in a well-documented and represented joint, multinational (MN), and interagency (IA) environment.

d. Reusable:

(1) The scenario is well documented, and the appropriate approval authority staffs and approves the scenario.

- (2) For maximum reusability, implement the scenario in accredited combat models and simulations.
- (3) Ensure the scenario is applicable over a variety of studies. Do not develop the scenario with a single use in mind; rather, create the scenario to provide an environment to measure numerous concepts.
- e. Responsive: The scenario design meets the analytical and decisionmaking needs of the Army and the OSD. Maintaining a small but skilled and experienced scenario development capability in the Army is critical to meeting this criterion.
- **2-5.** Scenario resolution. Scenario resolution describes the level of detail portrayed in a scenario and also the size of the force upon which the scenario focuses. The TRAC produces scenarios at two levels of resolution—UE and UA.
- a. Unit of Employment scenarios are usually derived directly from the DPS, but theater-level scenarios that other organizations produce are used when those scenarios exist. One source is the Multi-Service Force Deployment (MSFD) Illustrative Theater Operational Concept, developed through the Joint Staff J-8. The military services and national agencies jointly develop these scenarios for use throughout the analytic community. The MSFD is a critical source of joint data. These scenarios focus on Future Force corps/theater equivalent (UE $_{\rm y}$) and Future Force division equivalent (UE $_{\rm x}$) operations.
- b. Unit of Action scenarios are DPS-based and most often derived from existing UE scenarios. Because UA scenarios focus on a smaller battle within the UE area, it is possible to build more than one UA scenario from each UE scenario. Unit of Action scenarios extend from platoon level operations to UA operations.
- **2-6. Scenario development imperatives.** Scenarios cannot become biased, as the analytic efforts that stem from these scenarios will ultimately affect the soldier on the ground and the equipment the Army develops to support the soldier. As a result, make sure scenarios are both relevant and credible.
- a. To ensure their relevance, construct scenarios from an Army focus in a joint, MN, and IA context and cover the range of military operations.
- b. Scenarios must be credible, set in diverse OE depicting baseline U.S. ground forces. Generally, more than one scenario

will support a study; therefore, it is critical to develop these scenarios with varying OE characteristics. The following examples of spectrum and OE variety enable a relevant and credible family of scenarios to support combat development and transformation efforts:

- (1) Cover different regions of the world, attempting to employ each of the COCOMs.
- (2) Allow the full range of variables in the OE to affect operations.
- (3) Vary terrain characteristics from complex, open and rolling, desert, mountainous, triple canopy vegetation, to urban.
- (4) Cover the threat range of concepts, capabilities, and operations, from strategic to tactical.
- (5) Vary the weather to investigate employment constraints and limitations.
- (6) Apply different infrastructure capabilities, such as a mature versus an immature theater, and accessibility issues, such as threat actions at ports of embarkation and ports of debarkation.
- (7) Consider threat forces that gain "technological" surprise or use adaptive tactics to counter U.S. strengths.

2-7. Scenario production plan.

- a. The process of developing an operational scenario begins with the scenario production plan. The TRADOC scenario production plan guides collective scenario development over a 2- to 3-year projection. It answers the following questions to provide critical TRADOC guidance, establish responsibilities, identify resource requirements, and ensure relevancy to current and projected combat development efforts:
 - (1) What scenarios to produce?
 - (2) Who needs the scenarios?
 - (3) What organizations will participate in development?
 - (4) When is scenario completion required?

- (5) What are the scenario characteristics?
- (6) What are the resource requirements?
- b. Development and coordination of the scenario production plan occurs at the annual TRADOC-sponsored scenario development conference. This conference, typically conducted in the spring of each year, facilitates coordination, integration, and synchronization of the scenario development efforts among various TRADOC elements. TRADOC FC is responsible for developing the scenario production plan with input from TRAC and ADCSINT-Threats. The production plan approval authority is the Director, FC.
- c. The conference serves to synchronize the requirements of TRAC, TRADOC schools, battle labs, and other agencies, that is, OSD, HQDA, etc., with the guidance and directives established at higher headquarters.

Chapter 3 Scenario Development Process

3-1. Unit of Employment scenario development.

- a. Credible sources, such as the DPS, joint and Army concepts, COCOM staff-developed operation plans (OPLAN) and exercise material, CAA- and OSD-developed theater and campaign plans, and MSFD products provide the basis for scenario development. These sources lend credibility to the final product and ensure a valid service representation in a joint context. Scenario concept development must include the documentation that led to the requirement, or need for the UE scenario, and the basis for the scenario.
- b. Development of the scenario concept comes from these sources (see figure 3-1). The TRAC and TRADOC schools and battle labs develop the friendly concept of operation, while ADCSINT-Threats shapes the OE portrayal and develops the threat concept of operation. Detailed concept development occurs during a subject matter expert (SME) conference. TRADOC schools, centers, and labs will ensure participation in these conferences. Prior to, during, and after the SME conference, TRAC and ADCSINT-Threats conduct supporting concept analysis to ensure development of a feasible, acceptable, and suitable concept. The TRAC will establish documentation to reflect appropriate validation of the friendly and threat concepts, as well as OE portrayal.

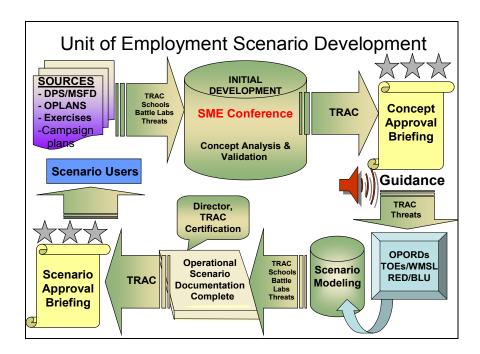


Figure 3-1. UE scenario development

- c. The Director, TRAC reviews and certifies the friendly concept, in writing, and ADCSINT-Threats reviews and certifies, in writing, the enemy concept. The TRAC and ADCSINT-Threats then present this concept to the Director, FC in the form of a concept approval briefing. All backup documentation for concept development is available for review. The TRAC prepares a concept approval memorandum for the Director, FC signature at the conclusion of the briefing. Once approved, TRAC and ADCSINT-Threats will incorporate Director, FC guidance, and begin the operational scenario documentation.
- d. Friendly and enemy operational scenario development and documentation begins in the form of a joint operation order (OPORD), functional component OPORDs, a UE $_{\rm y}$ OPORD, and UE $_{\rm x}$ OPORDs. The TRAC and ADCSINT-Threats prepare these OPORDs, with input from the TRADOC FC, proponent centers, and schools. The appropriate TRADOC directorates, joint and service planners, analysts and intelligence experts, theater level agencies, or applicable COCOM staffs, coordinate and review these OPORDs.
- (1) Assistant Deputy Chief of Staff for Intelligence-Threats provides TRAC foreign force tables of organization and equipment (TOE) and a WMSL (coordinated with the intelligence community).

- (2) Futures Center provides TRAC with the approved blue force structure (coordinated with the proponent TRADOC battle labs, centers, and schools). The TRAC coordinates with HQDA to obtain the necessary U.S. weapon system data and ammunition data for the required scenario force years.
- (3) The TRAC and ADCSINT-Threats prepare both blue and red WMSL and identify critical pairs. The TRAC also coordinates with AMSAA to provide system performance data for critical pairs; obtains digitized terrain data from appropriate sources; and other modeling data (operational/tactics, techniques, and procedures (TTP)) from proponent TRADOC battle labs, centers, schools, and other agencies. The ADCSINT-Threats reviews other modeling data, as necessary, to ensure appropriate portrayal of the threat.
- (4) The ADCSINT-Threats and TRAC develop the threat and friendly COA. They coordinate the COA with TRADOC battle labs, centers, and schools; HQ TRADOC; combatant commanders; and sister services, as required. The Deputy Director, TRAC, with assistance from the TRAC-Fort Leavenworth Senior Military Analyst (SMA), will select the friendly COA. The ADCSINT-Threats selects the threat COA. The Director, FC-approved concept is the basis for COA selections.
- (5) The ADCSINT-Threats, in coordination with TRAC, completes development of the threat operational scenario. The ADCSINT-Threats will coordinate the contents, which include threat TOEs, weapons, munitions, and sensors, and operational plan, with HQDA DCS, G-2 and, when appropriate, the Defense Intelligence Agency for threat validation.
- (6) The TRAC, with assistance from proponent TRADOC battle labs, centers, and schools, as required, completes development of the friendly operational scenario. Proponent TRADOC battle labs, centers, and schools produce supporting plans and annexes. The CASCOM coordinates the development of UE $_{\rm y}$ support command/UE $_{\rm x}$ support command plans with proponent TRADOC centers and schools.
- (7) Unit of Employment operational scenario development must include the developmental documentation and the friendly and threat validation from the appropriate organizations (that is, TRAC, TRADOC schools, battle labs, and TRADOC ADCSINT-Threats).
- e. Once the Director of TRAC reviews and certifies the UE operational scenario documentation in writing, TRAC presents it in the form of a briefing to the Director, FC for approval. The TRAC

prepares a scenario approval memorandum for the Director, FC signature at the conclusion of the briefing. Once approved, TRAC publishes and distributes the UE operational scenario for use in TRADOC studies.

3-2. Unit of Action scenario development.

- a. United States Army Training and Doctrine Command will develop UA scenarios from a completed and approved joint theater perspective or UE scenario. If no theater perspective or UE scenario precedes the development of the UA scenario, TRAC, in coordination with ADCSINT-Threats and CAA, will develop the theater perspective, using the DPS and/or CAA's theater-level work as the basis. In the case where there is a need for a non-DPS scenario to supplement DPS-based scenarios for study purposes, and there is no reasonable theater perspective available, TRAC will develop the theater perspective. Director, CDE will provide additional guidance, as required. Assistant Deputy Chief of Staff for Intelligence-Threats will assist TRAC in preparing a realistic and reasonable theater piece from the threat perspective and get threat validation prior to completion. The TRAC will publish the theater perspective as part of the UA operational scenario (see figure 3-2).
- b. The Director, TRAC-White Sands Missile Range (WSMR) and the Director, ADCSINT-Threats review and certify the concept in writing. The TRAC and ADCSINT-Threats then present this concept to the Director, CDE in the form of a UA scenario concept approval briefing. The concept briefing outlines the road to war, theater environment, friendly, threat, and neutral objectives and desired end states, the general and special situations, and includes assumptions and limitations, unit locations, system strengths, higher headquarters intent, COA, and orders. Have all backup documentation for concept development available for review. Documentation will include the requirement or need for the suggested UA scenario, friendly and threat concept validation, as well as validation of the OE portrayal from the appropriate organizations (that is, TRAC, TRADOC schools, battle labs, and ADCSINT). The TRAC will prepare a concept approval memorandum for the Director, CDE signature at the conclusion of the briefing. Once approved, TRAC and ADCSINT-Threats will incorporate Director, CDE guidance, and the operational scenario documentation can begin.
- c. The theater perspective or UE scenario provides TRAC and ADCSINT-Threats with force structure data. If this scenario is not sufficiently detailed, ADCSINT-Threats will provide the

foreign force structure. The TRAC coordinates with HQDA to obtain the necessary weapon system data and ammunition data for the required scenario force years. The TRAC and ADCSINT-Threats prepare both red and blue WMSL and identify critical pairs. The TRAC coordinates with AMSAA to provide system performance data for critical pairs; obtains digitized terrain data from appropriate sources; obtains foreign force structure and tactical employment information from ADCSINT-Threats; and other modeling data (operational/TTP) from proponent TRADOC battle labs, centers, schools, and other staff agencies. The ADCSINT-Threats reviews additional threat data obtained to ensure this modeling data appropriately portrays the threat.

- d. The TRAC manages production of each UA scenario. Designated proponent TRADOC battle labs, centers, and schools develop the friendly operational scenarios; ADCSINT-Threats, in coordination with the appropriate threat management office, develops the threat operational scenario. The TRAC will combine friendly and threat operational scenarios. TRADOC schools (fire support, engineer, air defense, etc.) provide their expertise to produce supporting plans, annexes, and support simulation.
- e. The Deputy Director, TRAC reviews and ensures documentation of the friendly and threat validation of the UA operational scenario, and concurs with the completed scenario. Once the Directors of TRAC-WSMR and ADCSINT-Threats review and certify in writing the UA operational scenario documentation, TRAC presents it in the form of a briefing to the Director, CDE for approval. The TRAC prepares a scenario approval memorandum for the Director, CDE's signature at the conclusion of the briefing. Once approved, TRAC publishes and distributes the UA operational scenario for use in TRADOC studies.

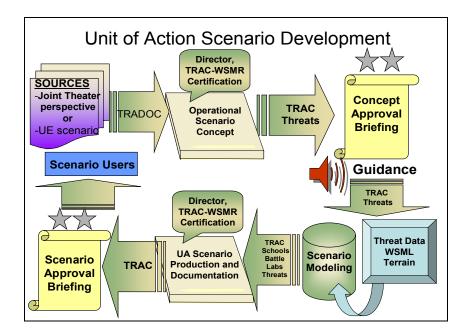


Figure 3-2. UA scenario development

3-3. Study scenario selection.

- a. A TRADOC UE scenario or UA scenario, once approved, is available for use in studies.
- b. Proponents will use the following steps for selecting the correct scenario for study use:
- (1) Review the study directive and/or guidance to determine the study purpose, objectives, study issues, and system(s) or forces for analysis.
- (2) Review the available scenarios listed and described in the TRADOC Scenario Gist Book (see <u>para 3-7</u>, below). Choose a list of scenarios that could provide a foundation for the study.
- (3) Narrow the list of scenarios to those with the appropriate force years or, when modified, represent the appropriate force years (coordinate with TRAC and ADCSINT-Threats).
- (4) Narrow the list of scenarios to those appropriate for the type of study. If it is a requirements study, select as many different scenarios from the list as possible in order to provide a solid foundation for system or force requirements. If the study is a system Analysis of Alternatives, select scenarios that provide a challenging environment so that differences in

capabilities, functions, and contribution to mission success are measurable.

- (5) Review the study readiness of the scenarios. Select scenarios that are documented, approved, and are available to use in the appropriate gaming in time to meet study milestones. Consider leveraging scenarios already in use in ongoing studies throughout TRADOC, if the appropriate parameters are not met.
- (6) Evaluate the resources available to execute study scenarios in time to meet study milestones. In addition to the preparing organization, consider other TRADOC, Army, or contractor-support gaming and modeling teams. Determine the availability of people and funding to support the study.
- (7) Present the scenario selections to the appropriate approval authority for approval or further guidance.
- c. The scenarios selected for the study are the source from which schools and battle labs will develop their vignettes.

3-4. Vignette development.

- a. Study Teams and ADCSINT-Threats will develop vignette(s) from a completed and approved UE or UA concept or scenario. Prior to vignette development, obtain Director, CDE approval. Add the record of approval to the vignette documentation packet.
- b. The ADCSINT-Threats and the Study Team jointly develop and coordinate the vignettes concept brief for Deputy, TRAC certification and Director, CDE approval. It outlines the road to war, theater environment, national objectives and desired end states, and the general and special situations; and includes assumptions and limitations, unit locations, system strengths, higher headquarters intent, course of action, and orders. It should specifically highlight those changes or deviations from the approved UE or UA scenario required for study or experiment purposes.
- c. The UE or UA scenario provides the study team and ADCSINT-Threats with force structure data. The study team and ADCSINT-Threats identify the weapons munitions list and critical pairs. The study team/TRAC coordinates with AMSAA to provide system performance data for critical pairs. The study team/TRAC obtains digitized terrain data from appropriate sources; foreign force structure and tactical employment information from ADCSINT-Threats; and other modeling data from proponent TRADOC battle

labs, centers, schools, and other staff agencies. The ADCSINT-Threats reviews additional threat data obtained to ensure this modeling data appropriately portrays the threat.

- d. The Study Team uses the vignette concept brief and input from designated proponent school or battle labs to develop the friendly operational scenarios that contain the friendly concept of operations and draft OPORDS. The Study Team and proponent battle lab or school coordinate with ADCSINT-Threats for all threat actions for vignette development. The ADCSINT-Threats, in coordination with the appropriate threat management office, develops the threat operational scenario. The Study Team combines friendly and threat operational scenarios.
- e. The TRAC SMA, through coordination with ACSINT-Threats and battle labs, reviews and ensures documentation of the friendly and threat validation of the vignette, and certifies the completed scenario vignette. Director, CDE reviews the completed and validated vignette and, if confirmed as a reasonable and representative setting for combat operations, approves the vignette.
- 3-5. Experiment scenarios. Experiments should use previously developed standard scenarios and vignettes, if possible. If it is necessary to develop a new scenario or vignette, apply the same general development and approval process described above for UE scenarios, UA scenarios, and vignettes to integrated experiment scenarios. The level of the scenario will determine the steps taken to achieve development, documentation, certification, and approval. To ensure TRADOC doctrinal and fiscal accountability, Director, CDE must approve the development of experiment scenarios and vignettes.
- 3-6. Scenario and vignette certification. Certify scenarios and vignettes to ensure they meet the standards for approval and provide an appropriate environment for conduct of studies, analyses, and experiments. Review scenarios and vignettes for DPS-compliance and appropriate representation of joint and Army concepts, friendly and threat forces and systems, and TTP; and to ensure they will provide appropriate "analytic space" to achieve the objectives of the supported studies, analyses, or experiments.
- a. Unit of Employment scenario. Prior to Director, FC approval, the Director, TRAC certifies in writing the UE scenario concept and the completed operational scenario. The basis for Director, TRAC certification is input from ADCSINT-Threats and the appropriate schools and battle labs.

- b. Unit of Action scenario. Prior to Director, CDE approval, the Directors, TRAC-WSMR and ADCSINT-Threats certify in writing the UA scenario concept and the completed operational scenario. The basis for this certification is input from ADCSINT-Threats and the appropriate schools and battle labs.
- c. Experiment scenarios and vignettes. For experiment scenarios and vignettes directly derived from certified and approved TRADOC UE and UA scenarios, the Deputy Director, TRAC certifies the experiment scenario or vignette concept and completed operational scenario prior to Director, CDE approval. The basis of this certification is input from ADCSINT-Threats and the appropriate schools and battle labs.
- 3-7. TRADOC Scenario Gist Book. The TRADOC Scenario Gist Book is an unclassified pamphlet that TRAC maintains, which describes all approved TRADOC scenarios and those in development. The pamphlet also contains a list of valid and rescinded scenarios. The TRAC updates and distributes this book annually, normally after the annual scenario conference. The GIST book is available through TRAC (ATRC-TD), 255 Sedgwick Avenue, Fort Leavenworth, KS 66027-2345. The updated Gist Book is also available on the TRAC Army Knowledge Online web site.

Chapter 4 Scenario Release

4-1. Release authority. The Director, TRAC is the TRADOC authority for release of scenario information to Department of Defense (DOD) agencies and activities, other government agencies, and contracting officers. Contractors with a valid requirement for scenario information can request access through their contracting officer.

4-2. Scenario distribution.

a. The TRAC makes initial distribution of the TRADOC scenarios, then submits the scenario to the Defense Technical Information Center (DTIC) for subsequent distribution to DOD agencies and contracting officers. The TRADOC scenarios are also available on the Army Knowledge Online-Secret (AKO-S) File Transfer Protocol site. Other government agencies will forward requests to Director, TRAC (ATRC-TD), 255 Sedgwick Avenue, Fort Leavenworth, KS 66027-2345.

- b. Submit requests from foreign governments/representatives for TRADOC scenario documentation through appropriate foreign disclosure channels to the TRADOC DCSINT. Send requests to Commander, TRADOC (ATIN-SD), 33 Ingalls Road, Fort Monroe, VA 23651-1067.
- c. The TRAC will not release TRADOC scenario material, or portions thereof, for distribution prior to FC final approval of scenarios. This restriction does not apply to force structure, terrain data, or systems performance data other agencies provide to TRAC. Until approved, the TRAC will not release study, vignette, modified, or integrated experiment scenario material. Obtain exceptions to this policy in writing from the Director, FC.
- d. Agencies requiring TRADOC scenario material will submit requests to DTIC (refer to DTIC Handbook for Users, found at http://www.dtic.mil/dtic/pubs/handbook/) or through AKO-S. Those TRADOC agencies with access to a school or technical library should initiate DTIC requests through the library. Agencies may write DTIC, 8725 John J. Kingman Road, Suite 0944, Fort Belvoir, VA 22060-6218 to obtain further information.

Appendix A References

Section I Required Publications

AR 380-5

Department of the Army Information Security Program

AR 381-11

Production Requirements and Threat Intelligence Support to the ${\tt U.S.}$ Army

TRADOC Reg 381-1 Threat Management

Section II Related Publications

Executive Order 12958, Classified National Security Information,
25 March 2003

DTIC Handbook for Users (This publication is available at http://www.dtic.mil/dtic/pubs/handbook/)

AR 5-5

Army Studies and Analysis

AR 5-11

Management of Army Models and Simulations

AR 5-14

Management of Contracted Advisory and Assistance Services

AR 10-87

Major Army Commands in the Continental United States

AR 70-1

Army Acquisition Policy

AR 71-9

Materiel Requirements

Chairman of the Joint Chiefs of Staff Instruction 3170.01D Joint Capabilities Integration and Development System (Available at http://www.dtic.mil/cjcs directives/cdata/unlimit/3170 01.pdf.)

DA Pam 5-5

Guidance for Army Study Sponsors, Sponsor's Study Directors, Study Advisory Groups, and Contracting Officer Representatives

TRADOC Reg 5-11

U.S. Army Training and Doctrine Command (TRADOC) Models and Simulations

TRADOC Reg 10-5

Headquarters, U.S. Army Training and Doctrine Command (available at http://www.tradoc.army.mil/dcsrm/index.htm. Click on "Management Directorate" link and scroll down frame to "TRADOC Reg 10-5 Organizations and Functions.")

TRADOC Reg 11-8

TRADOC Studies and Analysis

TRADOC Suppl 1 to AR 380-5

Department of the Army Information Security Program

Appendix B Scenario Classification Guide

B-1. Purpose and scope.

- a. The purpose of this guide is to ensure consistency within TRADOC for the classification of scenarios, model output, and analyses. The intent is to protect information in the interest of national security by preventing the unauthorized disclosure of classified material while eliminating unnecessary classification, preventing over-classification, and safeguarding materials that require no such protection. This policy provides guidance on minimum classification requirements based on the subject matter.
- b. These guidelines apply to all TRADOC organizations and personnel, and encompass all scenarios, simulation input and output, and analyses TRADOC develops or uses in support of combat developments.
- **B-2. TRADOC Information.** The following paragraphs provide specific guidelines regarding TRADOC <u>information</u> and <u>products</u> as related to scenarios, models and simulations, and wargaming efforts supporting TRADOC analyses.
- a. Scenarios. Most TRADOC standard scenarios derive from classified DPS information and thus contain derivatively classified information. Those TRADOC scenarios that are DPS-compliant will continue the classification of the DPS information. Mark any information in these TRADOC scenarios from the DPS that is already classified and incorporated, paraphrased, restated, or generated in new form, consistent with classification markings from the source information. For non-DPS scenarios TRADOC uses, Director, TRAC, as the Original Classification Authority (OCA), will determine classification level. See table B-1 for guidelines for classification of scenarios and compiled scenario information.
- b. Unclassified map exercises or wargames. If it is necessary to perform an unclassified wargame in support of study efforts, during this type of analysis effort, do not use the actual name of a current DPS threat. This includes any form of data that would make clear the identification of the real enemy.

Table B-1 Classification of scenario information

Compiled Information	Classification	Reason*
Threat associated with a specific country, nation, or threat	S	1.4 a, d, & e
organization		
Specific country name associated with a specific scenario.	S	1.4 a & d
Specific countries with specific cities, roads, rivers, or any	S	1.4 a, c, & d
geographical or man-made features associated with		
specific scenario or scenario force locations.		
Specific present-day countries and their actual military	S	1.4 a & d
forces.		
Specific threat names of forces and their organizational	S	1.4 c & d
structure relating specific numbers of systems and		
personnel.		
Maps depicting military operational graphics versus an	S	1.4 a & d
actual or projected threat in a specific country in the		
scenario.		

^{*}Refers to Executive Order (EO) 13292, Section 1.4, Volume 68, Federal Register (FR), page 15317.

- c. Development and use of unclassified scenarios. If it is necessary to develop totally unclassified scenarios to support TRADOC analysis, use the following guidelines:
- (1) If developing an unclassified scenario for the study or project, use the following disclaimer: "The following scenario is purely fictitious and does not represent any official policy of the United States or any other country. This scenario does not portray any real military plans or future plans. This scenario does not reflect the official position of the United States in regard to foreign policy or the foreign policies of any other country. The scenario depicted is intended for the purposes of addressing analytic issues as they relate to specific military problems. The scenario may also be used for training purposes."
- (2) Ensure foreign forces are fictitious, and do not identify any current threat.
 - (3) Label products "For Official Use Only."
- (4) If using classified data, ensure the model output is not traceable to a classified data point. Extract unclassified information from the classified model, as long as the output from the model is not traceable and transfer of the data uses approved HQDA procedures and authorized software.
 - d. Model input data.

- (1) System data. The AMSAA provides weapon system performance data, and provides appropriately classified information to TRADOC.
- (2) Operational data. Most operational data derives from the same sources as the TRADOC standard scenarios. Supporting the wargaming or simulation of scenarios may require additional operational data. Classify the information based on the source documents—the study director must refer to the original documents to determine classification. When SMEs must create operational data due to lack of published information, consider national security guidance regarding classification of the information (see para f(2), below).
- e. Model output data. Use model output to prepare reports and briefings. Any output, either operational or performance, used to regenerate classified input is classified. This type of classified output is normally in the form of results which detail a one-on-one relationship, such as a specific sensor versus a specific platform, or specific munition versus a specific target. Generally, the 'typical' results of threat and blue losses, loss exchange ratios, etc., will not link back to input data and are considered unclassified. Model output requires careful analysis.
- f. Preparing TRADOC products. It is important to consider and review the entire content, context, and information when preparing TRADOC products. Consider the prepared product in relation to other prepared products and information. For example, consider the briefing as associated with other briefings from other organizations given at the same time. Avoid unauthorized disclosure of information, either by itself, or in context with other information, which one could logically expect to cause damage to national security.
- (1) Context. The context in which statistical results appear is crucial to determining their level of classification. A statistic or number alone is not classified. Tying the statistic to other aspects of the scenario or study, however, could give it another classification. For example, stating in a document the specific vulnerabilities of a generic light armored vehicle is unclassified. However, adding context to the same document that mentions force structure or organizations to which this vehicle belongs, allows the threat to compile this information and decipher which specific vehicle has these vulnerabilities, and may render the document classified.

- (2) Compilation. Normally, a compilation of unclassified information is not classified. However, in unusual circumstances, certain information that otherwise is unclassified may require classification when combined or associated with other unclassified information. Information may require classification if the combination of unclassified items of information provides an added factor that warrants classification using the following categories found in EO 13292, 68 FR 15317, which states "information shall not be considered for classification unless it concerns:
 - (a) Military plans, weapons systems, or operations;
 - (b) Foreign government information;
- (c) Intelligence activities (including special activities), intelligence sources or methods, or cryptology;
- (d) Foreign relations or foreign activities of the United States, including confidential sources;
- (e) Scientific, technological, or economic matters relating to the national security, which includes defense against transnational terrorism;
- (f) United States Government programs for safeguarding nuclear materials or facilities;
- (g) Vulnerabilities or capabilities of systems, installations, infrastructures, projects, plans, or protection services relating to the national security, which includes defense against transnational terrorism; or
 - (h) Weapons of mass destruction."
- (3) Basics. As a general rule, the following is usually always classified:
- (a) Defense Planning Scenario and OPLAN information that associate specific real-world units with locations, objectives, operational terms, and symbols, such as avenues of approach.
- (b) Military tactics, procedures, doctrine, and organizations related to a specific foreign country, nation, group, organization, or coalition (when <u>derivative classification</u> requires or when describing sensitive vulnerabilities or capabilities).

- B-3. Duration of classification. For other than derivative classification, the OCA will determine that the sensitivity of the information requires marking for declassification for up to 25 years from the date of the original classification. This is performed if the unauthorized disclosure of the information is reasonably expected to cause damage to the national security, specifically, through (1) revealing actual U.S. military war plans that remain in effect, or (2) revealing information, including foreign government information, that would seriously and demonstrably impair relations between the U.S. and a foreign government, or seriously and demonstrably undermine ongoing diplomatic activities of the U.S.
- B-4. Office of primary responsibility. Address all inquiries concerning content and interpretation of this guide to TRADOC Futures Center, Concept Development and Experimentation Directorate (ATFC-ED), 10 Whistler Lane, Fort Monroe, VA 23651-1046.

Glossary

Section I Abbreviations

Assistant Deputy Chief of Staff for Intelligence ADCSINT Army Knowledge Online-Secret AKO-S AMEDD Army Medical Department AMEDDC&S Army Medical Department Center and School U.S. Army Materiel Systems Analysis Activity AMSAA AR Army Regulation AWC U.S. Army War College CAA Center for Army Analysis U.S. Army Combined Arms Center CAC CASCOM U.S. Army Combined Arms Support Command CDE Concept Development and Experimentation Commanding General CG COA course of action COCOM Combatant Command CSS combat service support Deputy Chief of Staff DCS DCSINT Deputy Chief of Staff for Intelligence DCSOPS&T Deputy Chief of Staff for Operations and Training Department of Defense DOD DOTMLPF Doctrine, Organization, Training, Materiel, Leader

Development, Personnel, and Facilities

27

DPS	Defense Planning Scenario
DTIC	Defense Technical Information Center
EO	Executive Order
FC	Futures Center
FR	Federal Register
G-2	Intelligence
G-3	Operations and Plans
HQ	headquarters
HQDA	Headquarters, Department of the Army
IA	interagency
J-8	Director for Force Structure, Resource, and
	Assessment
JACD	Joint and Army Concepts Division
MN	multinational
MSFD	Multi-Service Force Deployment
OCA	Original Classification Authority
OE	operational environment
OPLAN	operation plan
OPORD	operation order
OSD	Office of the Secretary of Defense
Reg	Regulation
SMA	Senior Military Analyst
SME	subject matter expert
TOE	table of organization and equipment
TRAC	U.S. Army TRADOC Analysis Center
TRADOC	U.S. Army Training and Doctrine Command
TTP	tactics, techniques, and procedures
UA	Unit of Action
UE	Unit of Employment
${\tt UE}_{\tt v}$	corps/theater equivalent in Future Force
UEx	division equivalent in Future Force
U.S.	United States
WMSL	weapons, munitions, and sensors lists

White Sands Missile Range

Section II Terms

WSMR

Derivative classification

"Derivative classification" means the incorporating, paraphrasing, restating, or generating in new form information that is already classified, and marking the newly developed material consistent with the classification markings that apply to the source information. The duplication or reproduction of existing classified information is not derivative classification.

(EO 13292, 60 FR 19830/AR 380-5, app B, sec 2.1)

Information

Information (as used in this regulation) means any knowledge that can be communicated, or documentary material, regardless of its physical form or characteristics, owned by, produced by or for, or under the control of the United States Government.

(EO 13292, 60 FR 19825/AR 380-5, app B, sec 1.1)

Original Classification Authority (OCA)

An individual authorized in writing, either by the President, the Vice President in the performance of executive duties, or by agency heads or other officials designated by the President, to classify information in the first instance. (EO $\underline{13292}$, 60 FR $\underline{19826/AR}$ 380-5, app B, sec 1.1)

Product

A product is communication of information in any form, including word documents, spreadsheets, databases, briefings, or graphics.

FOR THE COMMANDER:

OFFICIAL

ANTHONY R. JONES
Lieutenant General, U.S. Army
Deputy Commanding General/
Chief of Staff

/signed/
JANE F. MALISZEWSKI
Colonel, GS
Chief Information Officer